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FEDERAL COMMUNICATIONS COMMISSION
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Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

In the Matter of

Amendment of Part 5 of the Commission's)
Rules to Revise the Experimental Radio) ET Docket No. 96 - 256
Service Regulations)

Comments of Rockwell International Corporation

Pursuant to Section 1.415 of the Federal Communications Commission ("the Commission") Rules and Regulations, Rockwell International Corporation ("Rockwell") hereby submits an original and nine copies of Comments on the Notice of Proposed Rulemaking ("the Notice") regarding the amendment of the Commission's Experimental Radio Service ("ERS") rules.

INTRODUCTION

Rockwell is a diversified high technology company that manufactures a wide variety of radio frequency devices and components. Our Rockwell Collins, Inc. subsidiary ("Rockwell Collins") is a major manufacturer of avionics, including radio frequency devices, ranging from HF and VHF radios to aeronautical satellite communications terminals to weather radars, for civilian and military markets worldwide. Rockwell Collins also manufactures a variety of civilian and military land mobile radios and integrates and provides specialized communications systems

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such as air traffic control systems and fleet management and tracking systems, utilizing radio frequency data links and Differential Global Positioning System ("DGPS"). Rockwell Collins relies on the ERS in the testing, development and demonstration of many of its radio frequency products and systems.

Rockwell supports the Commission's proposals to streamline the ERS rules, to protect against abuses of the ERS and to protect public safety frequencies, but urges the Commission to incorporate the highest practical level of flexibility in adopting new ERS rules to encourage experimentation with radio frequency techniques and technologies that will benefit the public.

DISCUSSION

A. Efficient & Flexible ERS Licensing

Rockwell supports the Commission's efforts to strip the current ERS rules of unnecessary regulatory burdens and urges the Commission to incorporate the maximum level of flexibility feasible in the new ERS rules. The Notice makes several proposals intended to reduce the regulatory burdens of the ERS rules on both licensees and the Commission staff. Below, Rockwell addresses five year ERS license periods and the need for technical flexibility therein, and other proposed rule changes related to ERS licensing.

1) Five Year License Period

Rockwell strongly supports the adoption of a new class of ERS licenses with a five year license period. Five year ERS license periods will cut the paperwork and administrative burdens of an ongoing ERS authorization by more than half and provide applicants with more administrative flexibility in designing experimental programs. Rockwell believes that five years is an appropriate maximum licensing period. A five-year term will allow applicants and the

Commission to realize the greater efficiencies of longer license periods but still allow the Commission to maintain effective oversight of ERS operations. Rockwell notes that several of the Commission's radio services, including Private Land Mobile, Aeronautical Fixed, Marine Private Coast and others, have five year license periods.

The Notice requests comment on whether the Commission should reserve its proposed five year ERS authorizations for certain types of ERS operations.¹ Rockwell does not believe the Commission should restrict five year ERS authorizations to any particular type of experimental operation or class of applicant and thereby unnecessarily restrict the reduction in administration and paperwork associated with five year license periods. The Commission can establish conditions for operations and has proposed rules which can be used to prevent abuse of five year ERS license periods through reporting requirements.² Further, all ERS licensees operate on a secondary and non-exclusive basis and waive any claim to the use of particular frequencies against the regulatory power of the United States.

2) Technical Flexibility

The Notice states the Commission belief that five year license periods may be beneficial for certain segments of the communications industry, in particular companies which desire "to conduct experiments that involve ongoing research and development."³ However, technology and equipment, even within the scope of a well-defined experimental program, are likely to change over far shorter periods of time. The Commission has wisely proposed to maintain an ERS licensee's ability to change equipment provided that "the change does not result in operations inconsistent with any term of the outstanding authorization..." and that a description of the change is included in the next application for renewal.⁴ This provision allows ERS

¹ Notice, para. 7.

² Notice, Appendix A, Section 5.93 Limited market studies, Section 5.113 Adherence to program of research, and Section 5.73 Experimental report.

³ Notice, para. 7.

⁴ Notice, Appendix A, Section 5.77(a). Rockwell agrees with the continued limitations on changing antennas outlined in proposed Section 5.77(b).

licensees and the Commission staff to better realize the efficiencies of five year, and even two year, license periods by allowing licensees to modify experimental equipment.

Still greater efficiencies could be realized if the Commission allowed an ERS licensee to make discreet changes in emissions characteristics without requiring that it submit an application for modification, provided that the licensee establishes that such changes would not exceed the maximum emissions envelope in the existing authorization. The Commission's existing and proposed ERS rules allow use of any classification of emissions covered in Part 2 of the Commission's rules. In practice, ERS licensees must list all planned emissions characteristics in their applications in order for the Commission to establish the emissions envelope and coordinate the application. Licensees are then restricted to the emissions types and power levels that appear on their license certificates.

The flexibility to make discreet changes in emission characteristics would allow an ERS licensee to implement a less restrictive program of research and development. For example, a licensee could seek a five year license to develop VHF data radios, and be free to experiment with new and unforeseen data transmission protocols and techniques as they develop over the course of a five year license, provided that any changes made to emissions characteristics do not exceed the emissions envelope granted in the original license. The Commission could maintain oversight of discreet changes in emissions characteristics by requiring the licensee to submit written notification demonstrating that such changes will not exceed the maximum emissions envelope established in the existing authorization. The Commission would not need to issue a new license certificate upon receiving such a notification, nor would the licensee need to await authorization to implement a discreet change. If a discreet change in emission characteristics made pursuant to such a notification becomes a permanent part of the licensee's experimental program, the licensee could be required to list the discreet change in its next application for renewal.

⁵ Notice, para. 7.

3) Other Proposed Changes to ERS Licensing Rules

Rockwell fully supports the Commission's proposal to remove the requirements that each fixed station and each group of mobile stations be licensed separately pursuant to Section 5.55 (a) and (b) of the current ERS rules. Clearly, fixed and mobile transmitters used in the same experiments should be licensed under a blanket authorization when it is practical and desirable for an applicant. Rockwell also supports the Commission's proposal to allow applicants to apply for multiple related experiments under a single blanket license.⁷ Rockwell generally supports the Commission's proposals to allow electronic filing of applications, to remove requirements to notify the Compliance and Information Bureau field offices of experimental operations, to eliminate all references to construction permits in the ERS rules, to eliminate existing Section 5.63(c) requiring that expiration dates be distributed over the twelve calendar months, and to update the partial grant process in existing Section 5.58. Rockwell believes that these proposals will clarify and increase the efficiency of the ERS.

B. Special Temporary Authorization (STA)

The Notice proposes to modify existing Sections 5.53(e)(2) and 5.56 to remove the requirement that applicants possess an experimental license in order to apply for an STA and to add provisions for the preferential processing of STA applications in which the applicant sets forth compelling reasons why an STA should be granted expeditiously.⁸ Rockwell supports these proposals. The Notice also proposes that, in order to prevent abuse of the STA process and the administrative burdens that accompany such abuse, STAs not be renewed in the absence of extenuating circumstances.⁹ Rockwell is pleased that the Commission recognizes the potential for "unforeseen delays" in implementing short term research projects and supports the flexibility provided by allowing extensions or renewals of STAs under extenuating circumstances.

⁶ Notice, Appendix A, Section 5.93 Limited market studies, Section 5.113 Adherence to program of research, and Section 5.73 Experimental report.

⁷ Notice, para. 8 and Appendix A, Section 5.75.

⁸ Notice, para. 15.

⁹ Notice, para 18 and Appendix A, Section 5.61(b).

C. Protection of Public Safety Frequencies

The Notice proposes to prohibit ERS operations using public safety frequencies except when such experimental operations are of a public safety nature. The Notice also proposes that, when use of public safety frequencies are deemed essential, the resulting ERS license be conditioned to require coordination with the appropriate frequency coordinator and public safety entities.¹⁰

Rockwell recognizes the need to protect designated public safety spectrum and fully supports the concept that ERS applicants seeking to use public safety frequencies should be required to coordinate with the appropriate frequency coordinators and public safety entities.

¹⁰ Notice, para. 22.

CONCLUSION

Rockwell supports the Commission's proposals to streamline the ERS rules, to protect against abuses of the ERS and to protect public safety frequencies, but urges the Commission to incorporate the highest practical level of flexibility in adopting new ERS rules. To this end, Rockwell urges the Commission to allow ERS licensees to make discreet changes to emissions characteristics under the notification requirements proposed above. Rockwell believes that streamlined and flexible ERS rules will encourage more experimentation with radio frequency techniques and technologies that will benefit the public.

Respectfully Submitted,

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